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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,941	12/29/2004	Masaya Tanaka	0020-5615PUS1	5052
2292 7590 10/06/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
OSTRUP, CLINTON T				
ART UNIT		PAPER NUMBER		
3771				
NOTIFICATION DATE		DELIVERY MODE		
10/06/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/519,941

Applicant(s)

TANAKA, MASAYA

Examiner

CLINTON OSTRUP

Art Unit

3771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/2/08 & 8/11/08.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 1,2,4,6 and 9-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/11/08 has been entered.

As requested, claims 1, 2, 4 and 6 have been amended, claim 3, 5 and 7-8 have been cancelled, and claims 9-12 have been added. Thus, claims 1-2, 4, 6 and 9-12 are pending in this application.

Specification

2. The disclosure is objected to because of the following informalities: the use of the trademark TETRA CO₂™ has been noted in this application on page 23, 27, and 28. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks. Appropriate correction is required.

Claim Objections

3. Claims 1-2, 4, 6, and 9-12 are objected to because of the following informalities:

In the claims, when the term "the" or "said" is used, the word following the term "the" or "said" should have proper antecedent basis. The terms "the" and "said" appear numerous times in the claims without proper antecedent basis for the limitations following the terms "the" and "said."

For example, Claim 1 recites the limitation "the outside air" in line 2; however, there is insufficient antecedent basis for this limitation in the claim. Claim 1 also recites the limitation "the inside space" in line 5; however, there is insufficient antecedent basis for this limitation in the claim. Claim 2 recites the limitation "the decrease" in line 3; however, there is insufficient antecedent basis for this limitation in the claim. Claim 9 is objected to for reasons analogous to those of claim 1. Claim 10 has proper antecedent basis for "an absorption aid" but lacks antecedent basis for "the carbon dioxide absorption aid" in line 2. Applicant is reminded to be consistent in their terminology. Claim 11 is objected to for reasons analogous to those of claim 10. Any remaining claims are objected to as depending from an objected base claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "sheet-type" renders claims 4 & 11 indefinite because the claims include elements not actually disclosed (i.e. those encompassed by "type"), thereby rendering the scope of the claims unascertainable. The examiner respectfully suggests applicant consider the term "sheet" to obviate this rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishino et al., (JP 07-171189 A) and further in view of Tanaka et al., (WO 99/24043, based on the English Equivalent US 6,689,339).**

Regarding claim 1, Nishino discloses a carbon dioxide external administration device (figure 1) comprising: a sealing enclosure member (1) for sealing a body surface from the outside air; the sealing enclosure member holds carbon dioxide gas within a sealed inside space; a supply means (2) for supplying carbon dioxide into the inside space of the sealing enclosure member; and an absorption aid (water) that is provided in the inside space of the sealing enclosure member, contains a carbon dioxide-dissolving medium (water) for dissolving carbon dioxide gas, and dissolves carbon dioxide gas to assist transdermal or transmucosal absorption of the carbon dioxide. See: [0008-0015] and figure 1.

However, Nishino lacks the absorption aid containing at least one carbon dioxide-dissolving medium selected from the group consisting of (a) alcohols having a high vaporization temperature, (b) oils and fats, and (c) waxes.

Tanaka et al teaches a carbon dioxide external administration device with a carbon dioxide absorption aid that contains a carbon dioxide dissolving medium in the form of an emulsion or a cream and said emulsion or cream comprising at least an oil or fat, a surfactant and water. See: Tanaka et al., See: col. 2, lines 36 - col. 9, line 57.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the absorption aid (water) of Nishino, by using an aqueous viscous composition as taught by Tanaka with alcohols having high vaporization temperatures and oils and fats in order to provide an absorption aid that provides "improved skin comfort, usability, and the like of the composition by adding a perfume, color material, moisturizer, oily component..." See: Tanaka col. 9, lines 13-50.

Regarding claim 4, Tanaka teaches incorporating carbon dioxide containing viscous compositions into a sheet for topically applying carbon dioxide gas to skin. See: col. 3, line 65 - col. 4, line 3; col. 12, lines 4-33; col. 43, lines 38 - col. 44, line 58.

Regarding claim 6, Nishino discloses a carbon dioxide external administration device with a sealing enclosure member (1 or 11) that is made from a flexible material having a shape holding ability (when inflated), an elastic and flexible material (it expands and contracts as it is inflated) formed into a shower cap or a boot.

8. Claims 2 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishino et al., (JP 07-171189 A) in view of Tanaka et al., (WO

99/24043, based on the English Equivalent US 6,689,339) and further in view of Westwood (WO 98/173340).

The combined references disclose all the limitations of claim 2, except the carbon dioxide amount indicator being provided separately from the sealing enclosure member.

Westwood teaches a sealing enclosure member (10) with a valve (18) that would expand (open) when carbon dioxide is supplied into the sealing enclosure member (at least at a given pressure) and contracts (closes) when the amount of carbon dioxide decreases (when the pressure falls below the given pressure). See: figures 1-6.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have added a valve, as taught by Westwood, to the boot device disclosed by the combined references, in order to determine when the optimal amount of carbon dioxide pressure is being applied to the user.

Regarding claim 9, Nishino discloses a carbon dioxide external administration device (figure 1) comprising: a sealing enclosure member (1) for sealing a body surface from the outside air; the sealing enclosure member holds carbon dioxide gas within a sealed inside space; a supply means (2) for supplying carbon dioxide into the inside space of the sealing enclosure member; and an absorption aid (water) that is provided in the inside space of the sealing enclosure member, contains a carbon dioxide-dissolving medium (water) for dissolving carbon dioxide gas, and dissolves carbon dioxide gas to assist transdermal or transmucosal absorption of the carbon dioxide. See: [0008-0015] and figure 1; Tanaka et al teaches a carbon dioxide external administration device with a carbon dioxide absorption aid that contains a carbon

dioxide dissolving medium in the form of an emulsion or a cream and said emulsion or cream comprising at least an oil or fat, a surfactant and water. See: Tanaka et al., See: col. 2, lines 36 - col. 9, line 57; and Westwood teaches a carbon dioxide amount indicator (18) that expands upon carbon dioxide being supplied into the sealing enclosure member (by opening at a given pressure), and contracts (closing when the pressure falls below a given pressure) by the decrease of carbon dioxide; wherein the carbon dioxide amount indicator is provided separately (18 is attached to, but is separate from the lag bag) from the sealing enclosure member.

Regarding claim 10, Tanaka et al teaches a carbon dioxide external administration device with a carbon dioxide absorption aid that contains a carbon dioxide dissolving medium in the form of an emulsion or a cream and said emulsion or cream comprising at least an oil or fat, a surfactant and water. See: Tanaka et al., See: col. 2, lines 36 - col. 9, line 57.

Regarding claim 11, Tanaka teaches incorporating carbon dioxide containing viscous compositions into a sheet for topically applying carbon dioxide gas to skin. See: col. 3, line 65 - col. 4, line 3; col. 12, lines 4-33; col. 43, lines 38 - col. 44, line 58.

Regarding claim 12, both Nishino discloses a carbon dioxide external administration device with a sealing enclosure member (1 or 11) that is made from a flexible material having a shape holding ability (when inflated), an elastic and flexible material (it expands and contracts as it is inflated) formed into a shower cap or a boot.

Response to Arguments

9. Applicant's arguments with respect to claim 1, 2 and, 6 have been considered but are moot in view of the new ground(s) of rejection.

10. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the carbon dioxide indicator is provided separately from the sealing enclosure member") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

11. Applicant is reminded that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

12. Moreover, it has been held that the recitation that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CLINTON OSTRUP whose telephone number is (571)272-5559. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Clinton Ostrup/
Examiner, Art Unit 3771

/Justine R Yu/
Supervisory Patent Examiner, Art Unit 3771